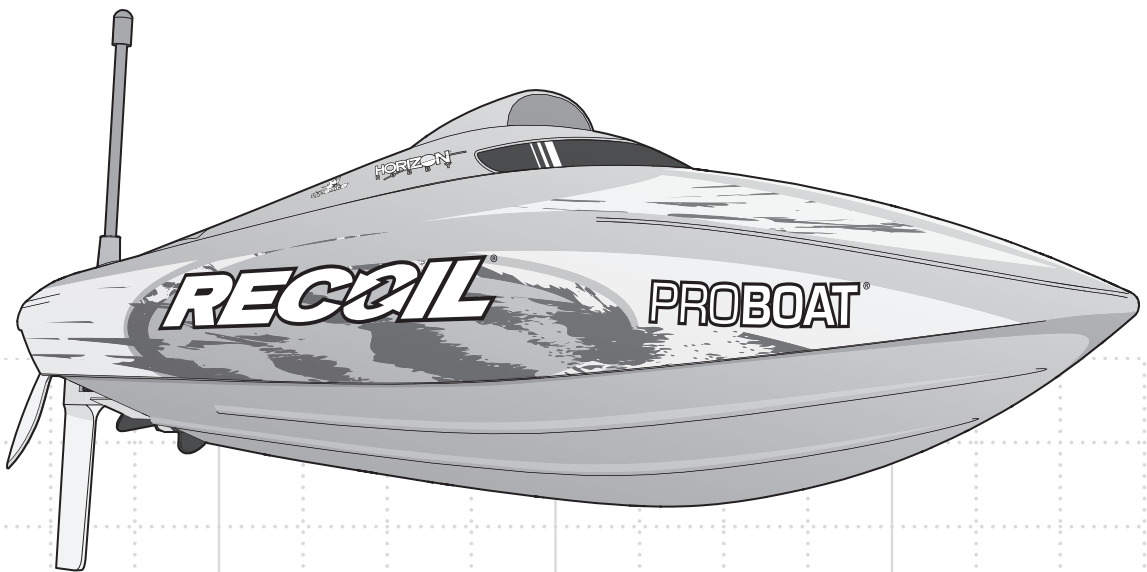


# **RECOIL**<sup>®</sup>

**17-INCH BRUSHLESS RTR DEEP-V BOAT**

*PRB08016*

**Owners Manual • Bedienungsanleitung  
Manuel de l'utilisateur • Manuale dell'utente**



## NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit <http://www.horizonhobby.com> and click on the support tab for this product.

## Meaning of Special Language

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

**NOTICE:** Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.

**CAUTION:** Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

**WARNING:** Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.



**WARNING:** Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product and NOT a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

**Age Recommendation: Not for children under 14 years. This is not a toy.**

## Safety Precautions and Warnings

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- When handling and/or transporting your boat, always pick up the boat from the front, keeping all moving parts pointed away from you.
- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.

- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to unprotected electronics.
- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.

## Charging Warnings

The included Battery Charger is designed to safely balance and charge the Li-Po battery.



**CAUTION:** All instructions and warnings must be followed exactly. Mishandling of Li-Po batteries can result in a fire, personal injury, and/or property damage.

- **Never leave charging batteries unattended.**
- **Never charge batteries overnight.**
- By handling, charging or using the included Li-Po battery, you assume all risks associated with lithium batteries.
- If at any time the battery begins to balloon or swell, discontinue use immediately.
- If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge a battery that is ballooning or swelling can result in fire.
- Always store the battery at room temperature in a dry area for best results.
- Always transport or temporarily store the battery in a temperature range of 40–120° F (5–49° C). Do not store battery or aircraft in a car or direct sunlight.

- If stored in a hot car, the battery can be damaged or even catch fire.
- Always charge batteries away from flammable materials.
- Always inspect the battery before charging and never charge damaged batteries.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always constantly monitor the temperature of the battery pack while charging.
- **ONLY USE A CHARGER SPECIFICALLY DESIGNED TO CHARGE LI-PO BATTERIES.**
- Failure to charge the battery with a compatible charger may cause fire resulting in personal injury and/or property damage.
- Never discharge Li-Po cells to below 3V under load.
- Never cover warning labels with hook and loop strips.
- Never charge batteries outside recommended levels.
- Never attempt to dismantle or alter the charger.
- Never allow minors to charge battery packs.
- Never charge batteries in extremely hot or cold places (recommended between 40–120° F or 5–49° C) or place in direct sunlight.

## Water-resistant Boat with Waterproof Electronics

Your new Horizon Hobby boat has been designed and built with a combination of waterproof and water-resistant components to allow you to operate the product in calm, fresh water conditions.

While the entire boat is highly water-resistant, it is not completely waterproof and your boat should NOT be treated like a submarine. The various electronic components used in the boat, such as the Electronic Speed Control (ESC), servo(s) and receiver are waterproof, however, most of the mechanical components are water-resistant and require additional maintenance after use.

Metal parts, including the bearings, pins, screws and nuts, propeller, rudder, rudder mounts, prop struts, as well as the contacts in the electrical cables, will be susceptible to corrosion if additional maintenance is not performed after running in wet conditions. To maximize the long-term performance of your boat and to keep the warranty intact, the procedures described in the “Wet Conditions Maintenance” section on next page must be performed regularly.



**CAUTION:** Failure to exercise caution while using this product and complying with the following precautions could result in product malfunction and/or void the warranty.

## General Precautions

- Read through the wet conditions maintenance procedures and make sure that you have all the tools you will need to properly maintain your boat.
- Not all batteries can be used in wet conditions. Consult the battery manufacturer before use. Caution should be taken when using Li-Po batteries in wet conditions.
- Most transmitters are not water-resistant. Consult your transmitter's manual or the manufacturer before operation.
- Never operate your transmitter or boat where lightning may be present.
- Salt water is very conductive and highly corrosive. If you choose to run your boat in salt water, immediately rinse the boat in fresh water after every use. Operating your boat in salt water is at the sole discretion of the modeler.
- Even minimal water contact can reduce the life of your motor if it has not been certified as water-resistant or waterproof. If the motor becomes excessively wet, apply very light throttle until the water is mostly removed from the motor. Running a wet motor at high speeds may rapidly damage the motor.
- Driving in wet conditions can reduce the life of the motor. The additional resistance of operating in water causes excess strain.

## Wet Conditions Maintenance

- Drain any water that has collected in the hull by removing the drain plug or canopy and tilting the boat in the appropriate direction to drain the water.



**CAUTION:** Always keep hands, fingers, tools and any loose or hanging objects away from rotating parts.

- Remove the battery pack(s) and disconnect the ESC and motor. Dry the contacts. If you have an air compressor or a can of compressed air, blow out any water that may be inside the recessed connector housings.
- Remove the drive shaft and all moving parts. Dry and lubricate parts after every 30 minutes of operation or if the boat becomes submerged.



**NOTICE:** Never use a pressure washer to clean your boat.

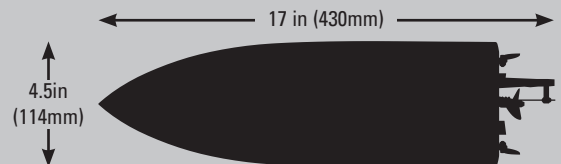
- Use an air compressor or a can of compressed air to dry the boat and help remove any water that may have gotten into small crevices or corners.
- Spray the bearings, fasteners and other metal parts with a water-displacing light oil or lubricant. Do not spray the motor.
- Let the boat air dry before you store it. Water (and oil) may continue to drip for a few hours.

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## Specifications

<b>Length</b>	17 in (430mm)
<b>Beam (width)</b>	4.5 in (114mm)
<b>Hull Material</b>	Plastic
<b>Motor</b>	Dynamite® Outrunner BL marine motor
<b>ESC</b>	Dynamite 30-amp brushless, water-cooled
<b>Transmitter</b>	ECX® 2.4GHz Transmitter
<b>Receiver</b>	ECX 2.4GHz Receiver, Waterproof
<b>Batteries</b>	11.1V 1400mAh 3S 30C LiPo w/EC3™ connector 4 AA batteries (sold separately) are required to operate the transmitter.



## Transmitter Controls

### Battery Level Indicator



Solid Red and Green: Battery voltage is good (above 4V).

Solid Red: Battery voltage is critically low (below 4V). Replace transmitter batteries.

### Throttle Dual Rate



Adjusts the maximum amount of throttle the vehicle can be given

### Steering Dual Rate



Adjusts the amount the rudder moves when the steering wheel is turned left or right

### Throttle Trim



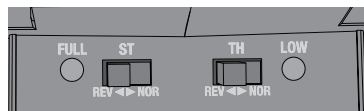
Adjusts the neutral point of the electronic speed control

### Steering Trim



Adjust to make the vehicle drive straight with no input at the steering wheel

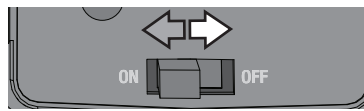
### Reverse Switch



Allows you to change the direction of steering (ST. REV) and throttle (TH. REV) controls (Ensure proper function with a radio system test).

### Power Switch

Power on or off the transmitter

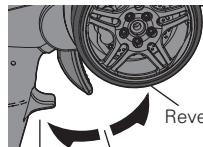


### Steering Wheel



Control steering. Right and Left steering

### Throttle Trigger



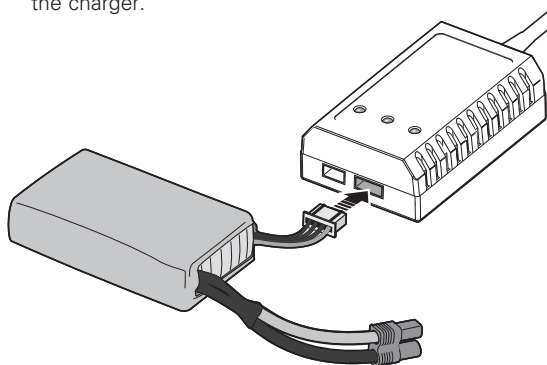
Controls power to the motor for forward or reverse

## Battery Charger

(A charger is not included with boats sold in Canada.)

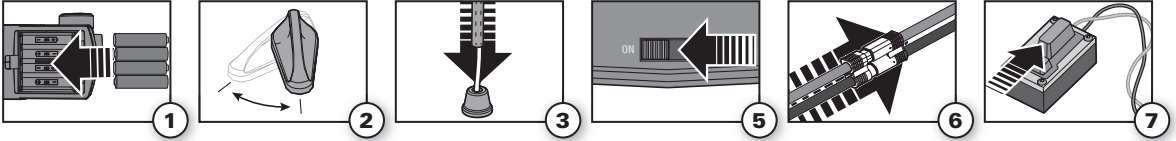
**NOTICE:** Never charge a battery in the boat or damage may result.

1. Connect the AC power cord to the power slot on the charger, then connect the other end of the power cord to an AC power source.
2. The three LEDs will turn GREEN when the charger is connected to the AC power source.
3. Connect the balance connector of the battery pack to the proper connector on the charger (the 3S connector has 4 pins and the 2S connector has 3 pins).
4. The three LEDs will turn RED, indicating the battery is charging.
5. When the charging of one cell is complete, the corresponding LED turns GREEN.
6. Once the battery pack is fully charged, all three LEDs will turn GREEN.
7. Disconnect the balance connector and battery from the charger.

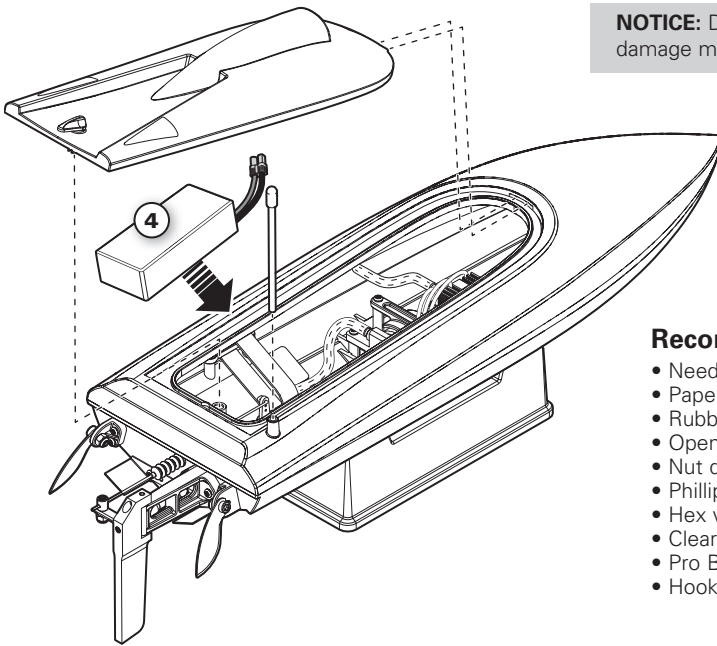


## Getting Started

1. Install 4 AA batteries into the transmitter.
2. Remove the canopy from the hull.
3. Install the receiver antenna in the antenna tube.
4. Install the fully charged battery in the compartment and secure it with the hook and loop strap.
5. Power on the transmitter. Ensure the throttle is not reversed and the throttle trim is neutral.
6. Connect the battery to the ESC.
7. Keep the throttle at neutral and power ON the ESC. The ESC automatically calibrates the throttle range after 3 seconds.
  - 3 beeps will sound, indicating the 3-cell Li-Po battery is connected.
  - 1 short beep will sound when the ESC is ready to run.
8. Install the canopy on the hull.



**NOTICE:** Do not cut or kink the receiver antenna or damage may result.



## Recommended Tools and Materials

- Needle nose pliers
- Paper towel
- Rubbing alcohol
- Open-end wrench: 10mm (2)
- Nut driver: 4mm, 5.5mm, 8mm
- Phillips screwdriver: #1
- Hex wrench: 1.5mm, 2mm, 2.5mm, 3mm
- Clear tape (DYNM0102)
- Pro Boat® Marine Grease and Gun
- Hook and Loop Tape Set, WP 4pcs

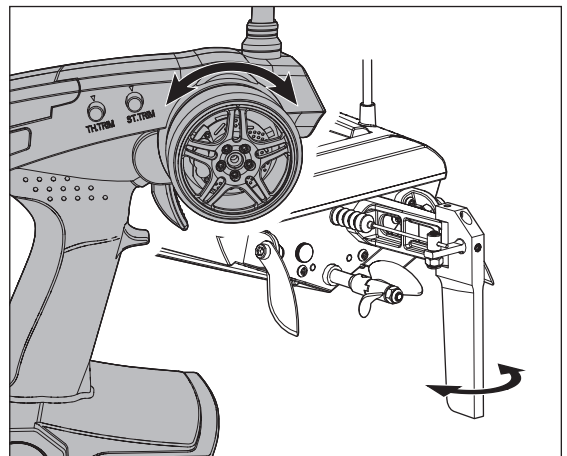
## Range Check

**IMPORTANT:** Perform a range check at the beginning of each boating session, after repair or after installation of new batteries.

Ensure the end of the receiver antenna is above the boat's water line and all batteries are fully charged.

1. With the radio system powered on and connected, walk away from your boat 90 feet (32 m).
2. Have an assistant remain with the boat to check for proper control movement of the rudder in response to your transmitter input.
3. If everything appears to be operating correctly, prepare to operate the boat in the water.

**NOTICE:** Do not operate the motor without water cooling circulation or damage may result.



## Boating Tips

When running your boat for the first time, we recommend calm wind and water conditions so that you can learn how the boat responds to your control.

Consult local laws and ordinances before choosing a location to pilot your boat.

1. Carefully place the boat in the water.
2. Operate the boat at slow speeds near the shoreline. Avoid objects in the water at all times. When the boat is moving forward, ensure water flows out of the coolant outlet.
3. Once you are comfortable operating the boat at slow speeds, it is safe to operate the boat farther from the shore at higher speeds.
4. When making turns, decrease the throttle to reduce the probability of flipping the boat over.
5. Bring the boat back to shore when the motor starts to pulse.



**CAUTION:** Never operate your boat in less than 12 inches (30.5 cm) of water.



**CAUTION:** Never attempt to retrieve a downed boat by swimming. If you need to retrieve your boat from the water, use fishing equipment or another boat.

### Avoid boating near:

- watercraft
- people (swimming areas, fishing areas)
- stationary objects
- waves, wakes
- rapidly moving water
- wildlife
- floating debris
- overhanging trees
- vegetation

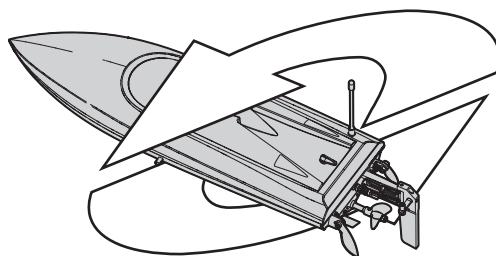
**NOTICE:** If the propeller and rudder are blocked with debris or vegetation, remove the boat from the water and remove the debris before continuing operation. Remove any blockage from the coolant system or the motor and ESC (electronic speed control) may overheat.

**NOTICE:** When running at full speed in choppy waters, the prop may exit and re-enter the water repeatedly and very quickly, subjecting the propeller and drive shaft to some stress. Frequent stress may damage the propeller and drive shaft.

## Self-righting

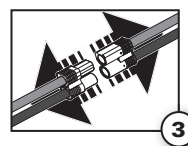
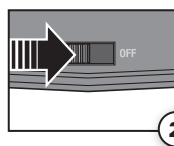
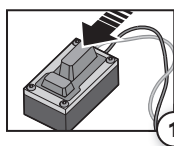
If the boat turns over, release the throttle until the boat comes to a stop. Return the boat to upright by applying a short throttle burst.

The boat sitting in the water normally leans to the battery side. Applying throttle levels the boat. No weight adjustment is necessary.



## When you are Finished

1. Power off the receiver.
2. Power off the transmitter.
3. Disconnect and remove the battery from the boat.

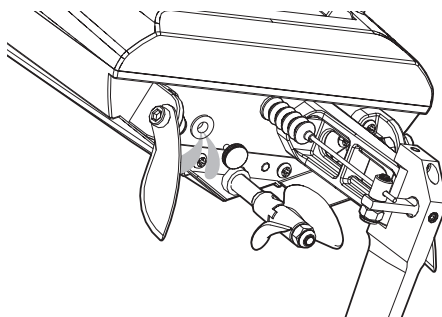


**Tip:** Always remove the canopy before storage or moisture may allow mold and mildew to grow in the boat. Drain water from inside the hull using the drain plug.

- Fully dry the inside and outside of the boat, including the water cooling lines and jacket around the motor
- Remove the hatch before storing your boat
- Repair any damage or wear to the boat
- Lubricate the drive shaft using Pro Boat Marine Grease (PRB0100)
- Make note of lessons learned from the trimming of your boat, including water and wind conditions

**Tip:** The hook and loop strips in the boat retain water. To dry them, press on them with a dry cloth.

**NOTICE:** When you are finished boating, never leave the boat in direct sunlight or in a hot, enclosed area such as a car. Doing so can damage the boat.



## Maintenance

### Drivetrain Lubrication

Always replace the drivetrain parts when they are damaged or show visible wear or injury and damage may result.

Lubricating the drive shaft is vital to the life of the drivetrain. The lubricant also acts as a water seal, keeping water from entering the hull through the stuffing tube.

Lubricate the drive shaft and all moving parts after every 30 minutes of operation. Lubricate the drive strut after every 90 minutes of operation.

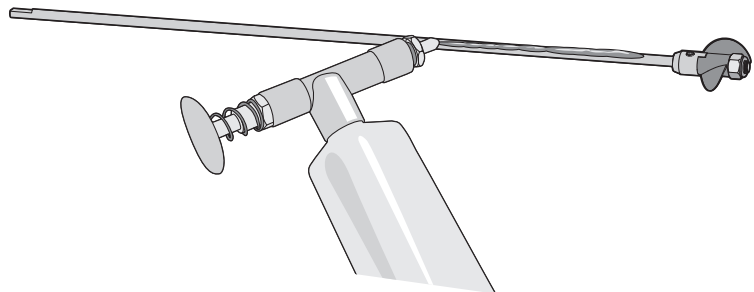
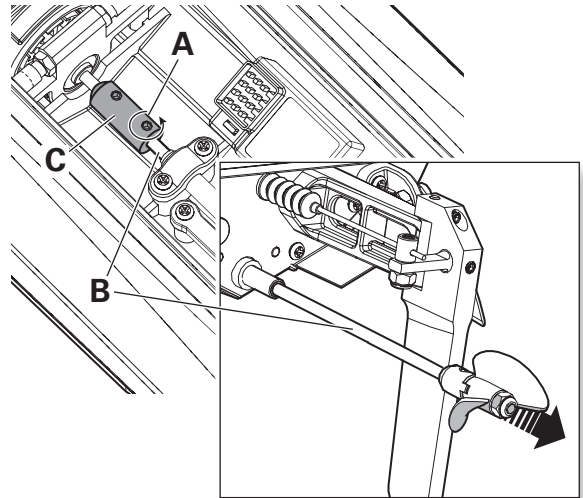
1. In the hull, loosen the setscrew (**A**) holding the drive shaft (**B**) in the motor coupling (**C**).
2. Slide the drive shaft out from the stuffing tube and drive strut at the rear of the boat.

**Tip:** Use paper or cloth to touch the drive shaft and other lubricated parts.

3. Wipe the old lubricant and material from the drive shaft.
4. Lubricate the full length of the drive shaft assembly up to the drive dog using marine grease (PRB0101 or PRB0100).
5. Carefully reinstall the drive shaft, ensuring that there is a 1–2mm gap between the stuffing tube and the drive dog.
6. Align the flat spot on the drive shaft with the set screw in the coupling. Apply threadlock to the coupling setscrew and tighten.

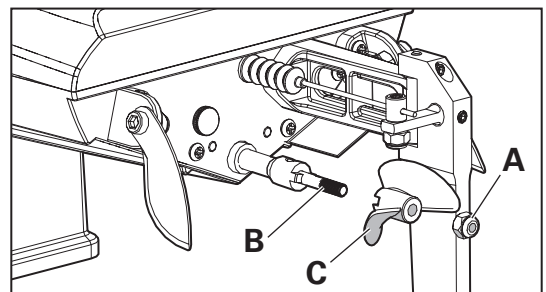
**NOTICE:** Running the boat in saltwater could cause some parts to corrode. If you run the boat in saltwater, rinse it thoroughly in freshwater after each use and lubricate the drive system.

**NOTICE:** Because of its corrosive effects, running RC boats in saltwater is at the discretion of the modeler.



### Propeller Service:

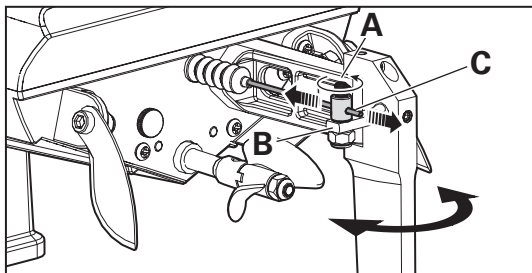
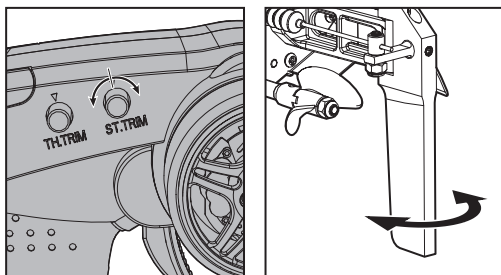
1. Use an 5.5mm nut driver to loosen the nut (**A**) from the driveshaft (**B**).
1. Remove the nut and propeller (**C**) from the driveshaft.
2. Assemble in reverse order. Correctly align the propeller with the drive dog on the driveshaft.





## Rudder Trim

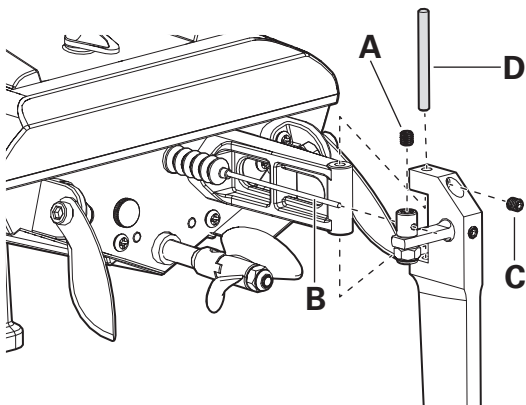
If the boat does not go straight, adjust the steering trim dial on the transmitter.



If you are using all the steering trim on your transmitter to make the boat drive straight, return the trim to neutral and mechanically center the rudder. To do this, loosen the hex nut (A) from the rudder horn (B), then adjust the linkage (C) until the rudder is properly centered.

## Rudder Service

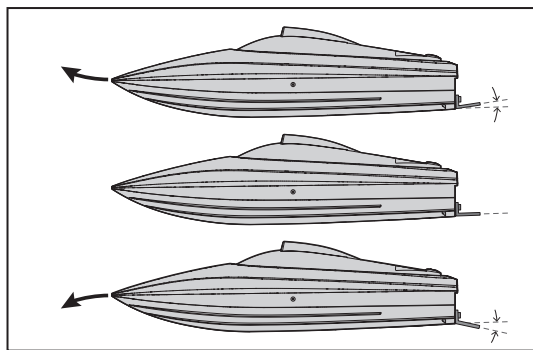
1. Loosen the setscrew (A) on the rudder arm using a 1.5mm hex wrench, then remove the linkage (B) from the rudder arm.
2. Loosen the setscrew (C) from the rudder pin (D) using a 1.5mm hex wrench.
3. Turn over the boat and lightly tap the rudder to remove the pin.
4. Assemble in reverse order.



## Trim Tab Adjustment:

**Tip:** Ensure the trim tab panels are parallel to the bottom of the boat.

You may desire to bend the trim tabs for wind and water conditions. To adjust the angle of the trim tabs, use a large pair of pliers to bend the tabs. This must be done carefully so that you do not damage the hull.

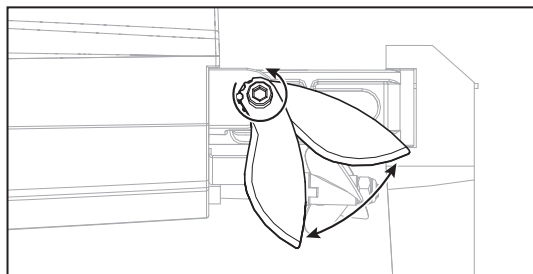


## Trim Fin Adjustment

**NOTICE:** Carefully handle the sharp trim fins, which can cause injury or damage.

1. Loosen and tighten the fins on the mount using a hex wrench and a pair of pliers.

**Tip:** Ensure the trim fins are near a 45-degree angle on the mount.

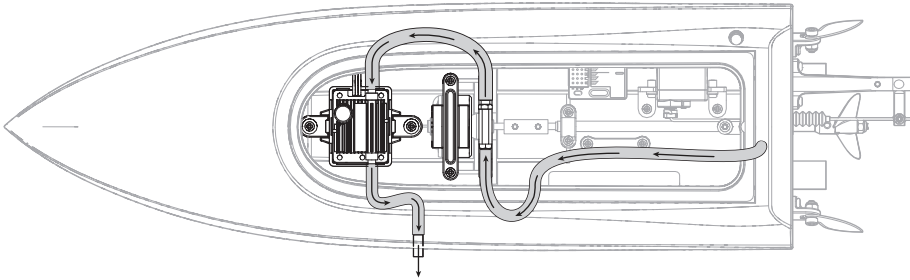




## Water Cooling System

If water does not stream out of the water outlets while the boat is moving forward, immediately stop the boat and clean the obstruction from the water cooling system.

1. Disassemble and clean the water cooling system to remove blockage and prevent overheating.
2. Replace any damaged parts.



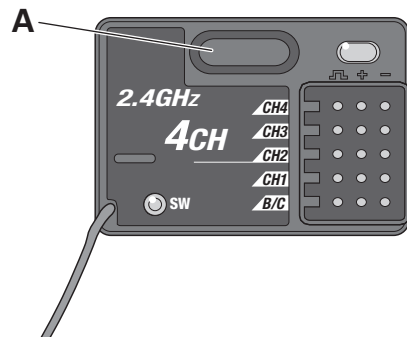
## Binding

The included transmitter and receiver are bound at the factory. If you need to rebind, follow the instructions below.

Binding is the process of programming the receiver to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter.

1. Power off the transmitter and ESC.
2. Connect a fully charged battery pack to the ESC.
3. Power on the ESC. The RED LED on the ESC flashes.
4. Press the bind button **(A)** on the receiver.  
The RED LED on the ESC flashes rapidly.
5. Power on the transmitter.
6. The RED LED on the ESC turns solid when the radio system is bound.

You must rebind when binding the receiver to a different transmitter.



**NOTICE:** Do not attempt to bind the transmitter and receiver if there are other compatible transmitters in bind mode within 400 feet. Doing so may result in unexpected binding.

## Failsafe

In the unlikely event that the radio connection is lost during use, the receiver will drive the servos to their pre-programmed failsafe positions (normally no throttle and straight steering).

If the receiver is powered on before powering on the transmitter, the receiver will enter this failsafe mode. When the transmitter is powered on, normal control is resumed.

## Low Voltage Cutoff (LVC)

Discharging a Li-Po battery below 3V per cell may damage your battery. The included ESC protects the boat battery from over-discharge using Low Voltage Cutoff (LVC). Before the battery charge decreases too much, LVC removes power supplied to the motor. Power to the motor pulses, showing that some battery power is reserved for boat control and safe landing.

Disconnect and remove the Li-Po battery from the boat after use to prevent trickle discharge. Charge your Li-Po battery to about half capacity before storage. During

storage, make sure the battery charge does not fall below 3V per cell. LVC does not prevent the battery from over-discharge during storage.

**NOTICE:** Repeated operation to LVC will damage the battery.

**Tip:** Monitor your boat battery's voltage before and after boating by using a Li-Po Cell Voltage Checker (DYN4071, sold separately).



## Troubleshooting Guide

Problem	Possible Cause	Solution
Boat will not respond to throttle but responds to other controls	Throttle channel is reversed	Reverse throttle channel on transmitter
Extra noise or extra vibration	Damaged propeller, shaft or motor	Replace damaged parts
	Propeller is out of balance	Balance or replace propeller
Reduced runtime or boat underpowered	Boat battery charge is low	Completely recharge battery
	Boat battery is damaged	Replace boat battery and follow battery instructions
	Blocking or friction on shaft or propeller	Disassemble, lubricate and correctly align parts
	Boat conditions may be too cold	Make sure the battery is warm (above 10° C (50° F)) before use
	Battery capacity may be too low for conditions	Replace battery or use a larger capacity battery
	Drive dog is too near the stuffing tube	Loosen drive shaft side of the motor coupling and move drive shaft small amount back
	Too little lubrication on drive shaft	Fully lubricate drive shaft
Boat will not Bind (during binding) to transmitter	Vegetation or other obstacles block the rudder or propeller	Remove vegetation or obstacles from rudder or propeller
	Transmitter is too near boat during binding process	Move powered transmitter a few feet from boat, disconnect and reconnect battery to boat
	Boat or transmitter is too close to large metal object, wireless source or another transmitter	Move the boat and transmitter to another location and attempt binding again
	Another compatible transmitter is powered on within range of the receiver	Power off all compatible transmitters except the one you are trying to bind
	Boat battery/Transmitter battery charge is too low	Replace/recharge batteries
Boat will not connect (after binding) to transmitter	ESC switch is off	Power on ESC switch
	Transmitter is too near boat during connecting process	Move powered transmitter a few feet from boat, disconnect and reconnect battery to boat
	Boat or transmitter is too close to large metal object, wireless source or another transmitter	Move boat or transmitter to another location and attempt to connect again
	Boat battery/transmitter battery charge is too low	Replace/recharge batteries
Boat tends to dive in the water or takes on water	ESC switch is off	Power on ESC switch
	The boat hull is not completely closed	Dry out the boat and ensure the hatch is fully closed on the hull before returning the boat to the water
	Center of gravity is too far forward	Move batteries back in the hull
Boat tends to turn one direction	Trim tabs are angled incorrectly	Angle each trim tab up a small amount to lift the bow or down a small amount to lower the bow
	Rudder or rudder trim is not centered	Repair rudder or adjust rudder and rudder trim for straight running when control is at neutral
	Vertical fins are angled incorrectly	Adjust the right or left fin angle for straight running when control is at neutral

Problem	Possible Cause	Solution
Rudder does not move	Rudder, linkage or servo damage	Replace or repair damaged parts and adjust controls
	Steering servo wire is damaged or connections are loose	Do a check of steering servo wires and connections, connect or replace as needed
	Transmitter is not bound correctly	Re-bind
	BEC (Battery Elimination Circuit) of the ESC is damaged	Replace ESC
	ESC switch is off	Power on ESC switch
Controls reversed	Transmitter settings are reversed	Do the Control Direction Test and adjust controls on transmitter appropriately
Motor overheats	Blocked water cooler tubes	Clean or replace water tubes
Motor power pulses then motor loses power	ESC uses default soft Low Voltage Cutoff (LVC)	Recharge boat battery or replace battery that is no longer performing
	Weather conditions might be too cold	Postpone until weather is warmer
	Battery is old, worn out or damaged	Replace battery

## LIMITED WARRANTY

### What this Warranty Covers

Horizon Hobby, LLC (Horizon) warrants to the original purchaser that the product purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase.

### What is Not Covered

This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vi) Product not compliant with applicable technical regulations.

OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

### Purchaser's Remedy

Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective. Horizon reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

### Limitation of Liability

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase.

### Law

These terms are governed by Illinois law (without regard to conflict of law principals). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

### WARRANTY SERVICES

#### Questions, Assistance, and Services

Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please visit our website at [www.horizonhobby.com](http://www.horizonhobby.com), submit a Product Support Inquiry, or call the toll free telephone number referenced in the Warranty and Service Contact Information section to speak with a Product Support representative.



Inspection or Services

If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Service Request is available at [http://www.horizonhobby.com/content/\\_service-center\\_render-service-center](http://www.horizonhobby.com/content/_service-center_render-service-center). If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

**NOTICE: Do not ship LiPo batteries to Horizon. If you have any issue with a LiPo battery, please contact the appropriate Horizon Product Support office.**

Warranty Requirements

For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

Non-Warranty Service

Should your service not be covered by warranty, service will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service, you are agreeing to Horizon's Terms and Conditions found on our website [http://www.horizonhobby.com/content/\\_service-center\\_render-service-center](http://www.horizonhobby.com/content/_service-center_render-service-center).

**⚠ ATTENTION: Horizon service is limited to Product compliant in the country of use and ownership. If received, a non-compliant Product will not be serviced. Further, the sender will be responsible for arranging return shipment of the un-serviced Product, through a carrier of the sender's choice and at the sender's expense. Horizon will hold non-compliant Product for a period of 60 days from notification, after which it will be discarded.**

Warranty and Service Contact Information

Country of Purchase	Horizon Hobby	Contact Information	Address
United States of America	Horizon Service Center (Repairs and Repair Requests)	<a href="http://servicecenter.horizonhobby.com/RequestForm/">servicecenter.horizonhobby.com/RequestForm/</a>	4105 Fieldstone Rd Champaign, Illinois, 61822 USA
	Horizon Product Support (Product Technical Assistance)	<a href="http://www.quickbase.com/db/bghj7ey8c?a=GenNewRecord">www.quickbase.com/db/bghj7ey8c?a=GenNewRecord</a>	
	Sales	888-959-2306	
United Kingdom	Service/Parts/Sales: Horizon Hobby Limited	<a href="mailto:sales@horizonhobby.co.uk">sales@horizonhobby.co.uk</a> +44 (0) 1279 641 097	Units 1–4 , Ployters Rd, Staple Tye Harlow, Essex, CM18 7NS, United Kingdom
Germany	Horizon Technischer Service	<a href="mailto:service@horizonhobby.de">service@horizonhobby.de</a>	Christian-Junge-Straße 1 25337 Elmshorn, Germany
	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	
France	Service/Parts/Sales: Horizon Hobby SAS	<a href="mailto:infofrance@horizonhobby.com">infofrance@horizonhobby.com</a> +33 (0) 1 60 18 34 90	11 Rue Georges Charpak 77127 Lieusaint, France
China	Service/Parts/Sales: Horizon Hobby – China	<a href="mailto:info@horizonhobby.com.cn">info@horizonhobby.com.cn</a> +86 (021) 5180 9868	Room 506, No. 97 Changshou Rd. Shanghai, China 200060

## FCC Information

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.



**CAUTION:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400GHz to 2.4835GHz frequency range.

## IC Information

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## Compliance Information for the European Union

### Declaration of Conformity

(in accordance with ISO/IEC 17050-1)

No. HH2014121401

Product(s): Recoil 17" Self-Righting Deep-V BL RTR  
Item Number(s): PRB08016I  
Equipment class: 1

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE Directive 1999/5/EC, EMC Directive 2004/108/EC and LVD Directive 2006/95/EC:

**EN 300-328 V1.8.1**

**EN 301 489-1 V1.9.2: 2012**

**EN 301 489-17 V2.1.1: 2009**

**EN 60950-1:2006+A11:2009+A1:2010+A12: 2011**

**EN 62311: 2008**

**EN 55022:2010 + AC:2011**

**EN 55024:2010**

**EN 61000-3-2:2006+A1:2009+A2:2009**

**EN 61000-3-3:2008**



Signed for and on behalf of:  
Horizon Hobby, LLC  
Champaign, IL USA  
December 11, 2014

Mike Dunne  
Executive Vice President  
Product Divisions  
Horizon Hobby, LLC



### Instructions for Disposal of WEEE by Users in the European Union

This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

## Replacement Parts / Ersatzteile / Pièces de rechange / Pezzi di ricambio

Part #	English	Deutsch	Français	Italiano
DYN1477	11.1V 1400mAh 3S 20C LiPo w/EC3	Dynamite Reaction Air 11.1V 1400mAh 3S 20C LiPo m. EC3	Batterie Li-Po 3S 11.1V 1400mA 20C avec prise EC3	Batteria LiPo 11.1V 1400mAh 3S 20C LiPo con EC3
DYN3915	Mini Servo, Water Proof	Dynamite Mini Servo Wassergeschützt	Mini-servo étanche	Servo mini, impermeabile
DYNC0505	20W Li-Po AC Balance Charger	Dynamite 20W LiPo AC Balance Ladegerät-EU	Chargeur équilibreur Li-Po 20W AC	Caricatore LiPo 10W con bilanciamento, AC
DYNM3860	30A BL Marine ESC 2-3S	Dynamite 30A BL Marine Regler ESC 3-3S	Contrôleur brushless 30A 2 à 3S Li-Po pour bateau	Regolatore (ESC) marino 30A BL 2-3S
DYNM3950	Outrunner BL marine motor	Dynamite: Aussenläufer BL Marine Motor: Recoil 17"	Moteur brushless à cage tournante pour bateau	Motore marino Outrunner BL
ECX13003	ECX 2.4GHz Receiver, 2-Channel V3	ECX 2.4GHz Empfänger, 2-Kanal V3	Récepteur ECX 2.4GHz 2 voies V3	Ricevitore ECX 2.4GHz, 2-Channel V3
ECX13002	ECX 2.4GHz Transmitter, 2-Channel V3	ECX 2.4GHz Sender, 2-Kanal V3	Émetteur ECX 2.4GHz 2 voies V3	ECX 2.4GHz canali V3
PRB281015	Canopy and Hull Hardware Set: Recoil 17	Recoil 17: Kabinenhaube und Zubehör	Recoil 17 - Coque et cockpit et accessoires	Set viteria per capottina e scafo: Recoil 17
PRB281016	Turn Fins & Trim Tabs: Recoil 17	Recoil 17: Turn Fins u. Trimfins.	Recoil 17 - Dérives et stabilisateurs	Pinne di virata e linguette trim: Recoil 17
PRB282010	Motor Mount: Recoil 17	Recoil 17: Motorhalter	Recoil 17 - Support moteur	Supporto motore: Recoil 17
PRB282011	3 Blade Propeller (2): Recoil 17	3 Blade Propeller (2): Recoil 17	3 Blade Propeller (2): Recoil 17	3 Blade Propeller (2): Recoil 17
PRB281017	Rudder & Rudder Mount Set: Recoil 17	Recoil 17: Ruder und Ruderhalterset.	Recoil 17 - Gouvernail et son support	Set timone e supporto: Recoil 17
PRB282012	Drive Shaft & Liner Set: Recoil 17	Recoil 17: Antriebswelle und Dichtungssset	Arbre de transmission et tube: Recoil 17	Set albero flessibile e tubo guida: Recoil 17

## Optional Parts / Diverse Teile / Pièces optionnelles / Pezzi opzionali

Part #	English	Deutsch	Français	Italiano
DYN2819	Hex Wrench 1.5mm, 2mm, 2.5mm, 3mm	Inbuschlüsselsatz 1.5-4mm 5Stk metrisch	Clés BTR 1.5mm, 2mm, 2.5mm et 3mm	Chiavetta esagonale 1.5mm, 2mm, 2.5mm, 3mm
DYN2828	Phillips screwdriver: #1	Schraubenzieher Kreuz #1	Tournevis cruciforme #1	Cacciavite Phillips: #1
DYN4071	Cell Voltage Checker	LiPo Cell Volt- Checker	Contrôleur de tension	Voltmetro celle
DYNC2010CA, DYNC2010EU, DYNC2010UK	Prophet Sport Plus 50W AC/DC Charger	Dynamite Ladegerät Prophet Sport Plus 50W AC/DC EU	Chargeur Prophet Sport Plus 50W AC/DC	Caricatore Prophet Sport Plus 50W AC/DC
DYNC2020, DYNC2020EU, DYNC2020UK,	Prophet Sport Duo 50Wx2 AC Battery Charger	Dynamite Prophet Sport Duo 50Wx2 AC Ladegerät, EU	Chargeur Prophet Sport Duo 50Wx2 AC	Caricabatterie Prophet Sport Duo 50Wx2 AC
DYNK0300	Hook and Loop Tape Set, WP 4pcs	Dynamite Klettband Set 75x25 4 Stk	Bande auto-agrippante adhésive, résistante à l'eau (4pcs)	Set nastro a strappo, WP 4pcs
DYNM0102	Waterproof Tape	Dynamite transparentes Marineklebeband (18m)	Adhésif transparent résistant à l'eau	Nastro impermeabile
PRB0100	Marine Grease	Proboat Marine Fett m. Applikator 5 oz	Graisse marine	Grasso marino

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